Summer Low Flow Trend Indicator 1975-2013
Data.wa.gov Metadata
April 9, 2014

The following descriptions explain the contents of each column in this data set:

- Stn ID: The official station identification code for each U.S. Geological Survey or U.S. Bureau of Reclamation flow gaging station.
- Station Name: A shortened version of the official flow gage name
- Salmon Region: The 7 Washington State Salmon Recovery Regions
- WRIA: The Water Resource Inventory Area where the watershed that drains to the flow gaging station is located.
- Trib Level: Indicates how far from the mouth of the river system the gage is located, based on the naming conventions of tributaries:
    - 1 = mainstem site (drains to sea or sound)
    - 2 = tributary to Level 1 mainstem site (note: all mainstem sites on rivers that drain to the Columbia River, such as the Yakima River, are Level 2)
    - 3= tributary to Level 2 tributary
    - 4 = tributary to Level 3 tributary
- M-K p: The 'p' value for the Mann-Kendall non-parametric trend test.
    - A 'p' less than 0.5 indicates that "more likely than not" a trend exists, rather than the relationship being due to randomness, which is designated as a "weak" trend.
    - A 'p' level less than 0.1 indicates that it's "very likely" a trend exists, which is designated as a "strong" trend.
    - A 'p' value greater than 0.5 is considered most likely due to randomness, and is designated as "no trend".
- Reg p: The 'p' value for the linear regression trend test. The same designations for the 'p' value apply as defined above for "M-K p".
- Trend category: Based on the lowest 'p' value of the Mann-Kendall and Linear Regression trend tests, the trends are placed in one of five categories:
    - Strong increasing = positive slope on linear regression and at least one 'p' value less than 0.1.

- o Weak increasing = positive slope on linear regression and at least one 'p' value less than 0.5
- o No trend = both 'p' values greater than 0.5
- o Weak increasing = negative slope on linear regression and at least one 'p' value less than 0.5
- o Strong decreasing = negative slope on linear regression and at least one 'p' value less than 0.1.
- Trend (cfs/yr): The slope on the linear regression line, representing the average annual increase or decrease in flow over the period of record.
- Trend (%/year): The slope of the linear regression line divided by the average over the period of record of the annual values of minimum 30-day average low flow. This represents the average annual percent increase or decrease in flow.
- Cat. Change from 2011: This shows how the trend category for this gage has changed from baseline conditions (1975-2011 trend) with 2 more years of flow data added (current 1975-2013 trend).
- Change from 2012: This shows how the trend for this gage has changed from last year's trend (1975-2012) with 1 more year of flow data added (current 1975-2013 trend).
  - o up = the slope of the linear regression trend line has increased (less negative or more positive) compared to last year
  - o down = the slope of the linear regression trend line has decreased (more negative or less positive) compared to last year